**Amendments to the Specification**

Starting on page 4, please replace paragraph [0017] with the following new paragraph [0017]:

**[0017]** The link layer port 113 processes header information for the relevant link layer protocol of the PDUs 101, 103, 105 and 107. The PDUs 101, 103, 105 and 107 then flow to a link layer demultiplexer (demux) 115. The link layer demux 115 separates the flow of PDUs according to their encapsulation. The flow of PPPoX PDUs 101 and 103 are passed to a PPP switch module 119 separately from the flow of PPPoE PDUs ~~107~~ 105, which are also passed to the PPP switch module 119. The link layer demux 115 passes the flow of IpoE PDUs 107 to a virtual router 117. The virtual router 117 processes the flow of IPoE PDUs 107 and forwards the flow of IPoE PDUs 117 out a port 121. The network element 100 is not limited to passing IPoE PDUs to the virtual router, a specific PDU has been selected to aid in the understanding of the invention and not meant to be limiting upon the invention. Different flows of PDUs (e.g., IPoA, IPoMPLS, etc.) may pass from the link layer demux 115 to the virtual router 117.

Starting on page 5, please replace paragraph [0018] with the following new paragraph [0018]:

**[0018]** The PPP switch module 119 establishes PPPoE sessions for each flow of PDU that it receives. The PPP switch module 119 coverts the PPPoX PDUs 101 and 103 into

PPPoE PDUs 125. The PPP switch module 119 then transmits the PPPoE PDUs ~~107~~ 105 and the converted PPPoE PDUs 125 out of a port 123 (e.g., a Gigabit Ethernet port) along an aggregator side media 131 (e.g., Ethernet, GigE, GRE, MPLS, ATM, Packet over Sonet, L2TP, etc.).